

Claims:

1. A hydraulic jack, comprising
  - an oil reservoir that stores a hydraulic fluid therein;
  - an inner chamber axially disposed within the oil reservoir;
  - a piston rod axially disposed within the inner chamber;
  - a piston rod chamber is provided in the piston rod;
  - a pump assembly having a pump piston that reciprocates therein and a pumping chamber that receives hydraulic fluid from the oil reservoir, wherein the pumping chamber's volume is between about 1/5 to 1/7 of the piston rod chamber's volume; and
  - a sequence valve that is press fitted into a hydraulic channel, includes a spherical ball having a hydraulic interacting surface and regulates fluid flow from the pumping chamber to the inner chamber.
2. The hydraulic jack of claim 1, wherein hydraulic fluid is selected from a group consisting of oil, water, automatic transmission fluid, lubricants, other fluids and a combination thereof.
3. The hydraulic jack of claim 1, further includes a sealing member that is in sealing relationship between the piston rod and an inner chamber housing, wherein the fluid acts on a surface of the sealing member to move the piston rod axially.
4. The hydraulic jack of claim 1, wherein the pump piston is moved reciprocally by a handle that can be attached thereto.
5. The hydraulic jack of claim 1, wherein the pumping chamber's volume is 1/6 of the piston rod chamber's volume.

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6. The hydraulic jack of claim 1, wherein the sequence valve allows fluid to flow into the inner chamber when the piston rod meets a load.

7. The hydraulic jack of claim 1, wherein the piston rod has a connector that can be coupled to a load bearing surface.

8. A method of moving a load, comprising:

pumping a pump piston with a handle;

drawing fluid from an oil reservoir to a pumping chamber by a vacuum created by the pumping;

moving the fluid from the pumping chamber to a piston rod chamber by additional pumping of the pump piston, the pumping chamber's volume is between about 1/5 to 1/7 of the piston rod chamber's volume;

extending a piston rod to contact a load with the fluid in the piston rod chamber; and

extending the piston rod further to move the load by increasing the amount of fluid acting on the piston rod when needed by setting a sequence valve that is press fitted and has a spherical ball to open at a predetermined pressure so that fluid is supplied to an inner chamber of the piston rod to move the piston rod.

9. The method of claim 8, wherein the fluid is a hydraulic fluid that is selected from a group consisting of oil, water, automatic transmission fluid, lubricants, other fluids and a combination thereof.

10. The method of claim 8, wherein increasing the amount of fluid occurs when the piston rod reaches a load and requires additional fluid to move the load.

11. The method of claim 8, wherein the volume of the pumping chamber is 1/6 the volume of the piston rod chamber.

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12. The method of claim 8, wherein the increased amount of fluid is acting on a sealing member that is in sealing relationship between the piston rod and an inner chamber housing, wherein the fluid acts on a surface of the sealing member to move the piston rod axially.

13. A hydraulic bottle jack, comprising:  
means for storing a hydraulic fluid;  
means for moving fluid into and out of a pumping chamber;  
means for channeling fluid from the pumping chamber to a piston rod chamber, the pumping chamber's volume is between about 1/5 to 1/7 of a piston rod chamber;  
means for lifting a load having the piston rod chamber therein; and  
means for increasing fluid provides additional fluid to the means for lifting when the means for lifting requires additional fluid to move a load, wherein the means for increasing fluid is pressed-fitted into the jack and has a spherical ball.

14. The hydraulic bottle jack of claim 13 further includes a rocker means that is coupled with the means for moving fluid, wherein the rocker having a handle can be used by an operator to move the means for moving fluid.

15. The hydraulic bottle jack of claim 13, wherein hydraulic fluid is selected from a group consisting of oil, water, automatic transmission fluid, lubricants, other fluids and a combination thereof.

16. The hydraulic bottle jack of claim 13, wherein the volume of pumping chamber is 1/6 the volume of the piston rod chamber.

17. The hydraulic bottle jack of claim 13 further comprising a support means at one end so that the bottle jack may be placed in a position that allows the means for lifting to extend in an upwardly direction.

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18. The hydraulic bottle jack of claim 17, wherein the support means includes the means for channeling fluid.

19. The hydraulic bottle jack of claim 13, wherein the means for lifting a load is connected to a load bearing surface.

20. The hydraulic bottle jack of claim 13, wherein further comprising a means for sealing positioned between the means for lifting and an inner chamber housing so that fluid can act on the means for sealing and move the means for lifting.